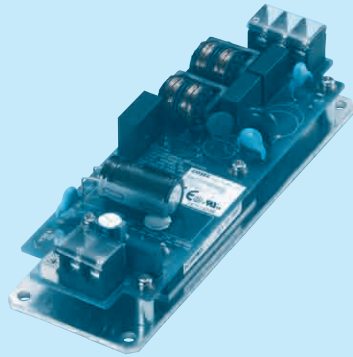


## SNTUNS50

SNTUN S 50 F 05 - ☐

① ② ③ ④ ⑤ ⑥

Recommended EMI/EMC Filter  
NAC-04-472

High voltage pulse noise type : NAP series  
Low leakage current type : NAM series

\* The EMI/EMC Filter is recommended to connect with several devices.

- ① Series name  
② Single output  
③ Output wattage  
④ Universal Input  
⑤ Output voltage  
⑥ Optional  
C : with Coating  
J : Connector type

| MODEL                 | SNTUNS50F05 | SNTUNS50F12 | SNTUNS50F24 |
|-----------------------|-------------|-------------|-------------|
| MAX OUTPUT WATTAGE[W] | 50.0        | 50.4        | 50.4        |
| DC OUTPUT             | 5V 10A      | 12V 4.2A    | 24V 2.1A    |

## SPECIFICATIONS

|                                     | MODEL                                | SNTUNS50F05                                                                                 | SNTUNS50F12   | SNTUNS50F24   |
|-------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------|---------------|---------------|
| INPUT                               | VOLTAGE[V]                           | AC85 - 264 1 $\phi$ (Please refer to the instruction manual 1.1 and 3.2)                    |               |               |
|                                     | CURRENT[A]                           | ACIN 100V 0.67typ (Io=100%)                                                                 |               |               |
|                                     |                                      | ACIN 200V 0.37typ (Io=100%)                                                                 |               |               |
|                                     | FREQUENCY[Hz]                        | 50/60 (47 - 63)                                                                             |               |               |
|                                     | EFFICIENCY[%]                        | ACIN 100V 76typ                                                                             | 80typ         | 81typ         |
|                                     |                                      | ACIN 200V 78typ                                                                             | 83typ         | 84typ         |
|                                     | POWER FACTOR (Io=100%)               | ACIN 100V 0.95typ                                                                           |               |               |
|                                     |                                      | ACIN 200V 0.90typ                                                                           |               |               |
| OUTPUT                              | INRUSH CURRENT[A]                    | ACIN 100V 15typ (Io=100%) (At cold start) (Ta=25°C)                                         |               |               |
|                                     |                                      | ACIN 200V 30typ (Io=100%) (At cold start) (Ta=25°C)                                         |               |               |
|                                     | LEAKAGE CURRENT[mA]                  | 0.4/0.75 (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN)               |               |               |
|                                     | VOLTAGE[V]                           | 5                                                                                           | 12            | 24            |
|                                     | CURRENT[A]                           | 10                                                                                          | 4.2           | 2.1           |
|                                     | LINE REGULATION[mV]                  | 10max                                                                                       | 24max         | 48max         |
|                                     | LOAD REGULATION[mV]                  | 150max                                                                                      | 100max        | 100max        |
|                                     | RIPPLE[mVp-p]                        | 0 to +95°C *1 80max                                                                         | 120max        | 120max        |
|                                     |                                      | -20 to 0°C *1 140max                                                                        | 160max        | 160max        |
|                                     |                                      | 0 to 15% Load *1 200max                                                                     | 280max        | 380max        |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | RIPPLE NOISE[mVp-p]                  | 0 to +95°C *1 120max                                                                        | 150max        | 150max        |
|                                     |                                      | -20 to 0°C *1 200max                                                                        | 200max        | 250max        |
|                                     |                                      | 0 to 15% Load *1 280max                                                                     | 360max        | 460max        |
|                                     | TEMPERATURE REGULATION[mV]           | 0 to +65°C 50max                                                                            | 120max        | 240max        |
|                                     |                                      | -20 to +95°C 100max                                                                         | 240max        | 480max        |
|                                     | DRIFT[mV]                            | *2 20max                                                                                    | 40max         | 90max         |
|                                     | OUTPUT VOLTAGE ADJUSTMENT RANGE[V]   | 4.50 - 5.50                                                                                 | 10.80 - 13.20 | 21.60 - 26.40 |
|                                     | OUTPUT VOLTAGE SETTING[V]            | 5.00 - 5.15                                                                                 | 12.00 - 12.48 | 24.00 - 24.96 |
|                                     | OVERCURRENT PROTECTION               | Works over 105% of rating and recovers automatically                                        |               |               |
|                                     | OVERVOLTAGE PROTECTION[V]            | 6.30 - 7.00                                                                                 | 13.90 - 16.35 | 27.60 - 32.40 |
| ISOLATION                           | REMOTE SENSING                       | Not provided                                                                                |               |               |
|                                     | REMOTE ON/OFF                        | Not provided                                                                                |               |               |
|                                     | INPUT-OUTPUT                         | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15°C)            |               |               |
| ENVIRONMENT                         | INPUT-FG                             | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15°C)            |               |               |
|                                     | OUTPUT-FG                            | AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20 $\pm$ 15°C)             |               |               |
|                                     | OPERATING TEMP., HUMID. AND ALTITUDE | -20 to +95°C (On aluminum base plate), 20 - 95%RH (Non condensing) *4                       |               |               |
| SAFETY AND<br>NOISE REGULATIONS     | STORAGE TEMP., HUMID. AND ALTITUDE   | -20 to +95°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max                         |               |               |
|                                     | VIBRATION                            | 10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis |               |               |
|                                     | IMPACT                               | 196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis                          |               |               |
| OTHERS                              | AGENCY APPROVALS                     | UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN                       |               |               |
|                                     | CONDUCTED NOISE                      | Complies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-B                                  |               |               |
|                                     | HARMONIC ATTENUATOR                  | Complies with IEC61000-3-2 (Class A) *3                                                     |               |               |
| OTHERS                              | CASE SIZE/WEIGHT                     | 50 X 36 X 150mm [1.97 X 1.42 X 5.91 inches] (W X H X D) / 230g max                          |               |               |

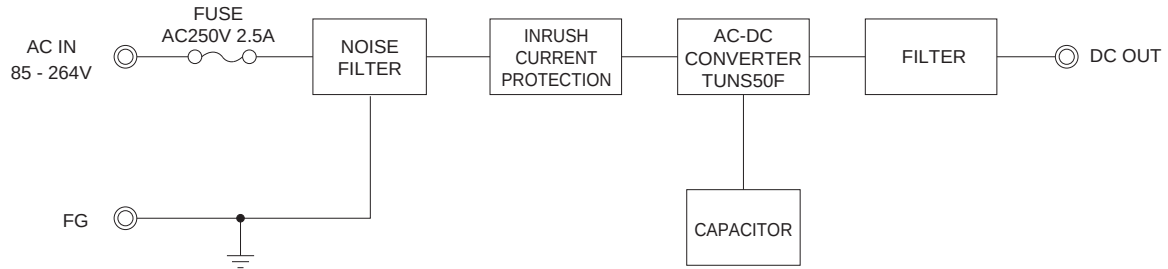
\*1 Refer to Instruction manual for measuring method of an electrical property.

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

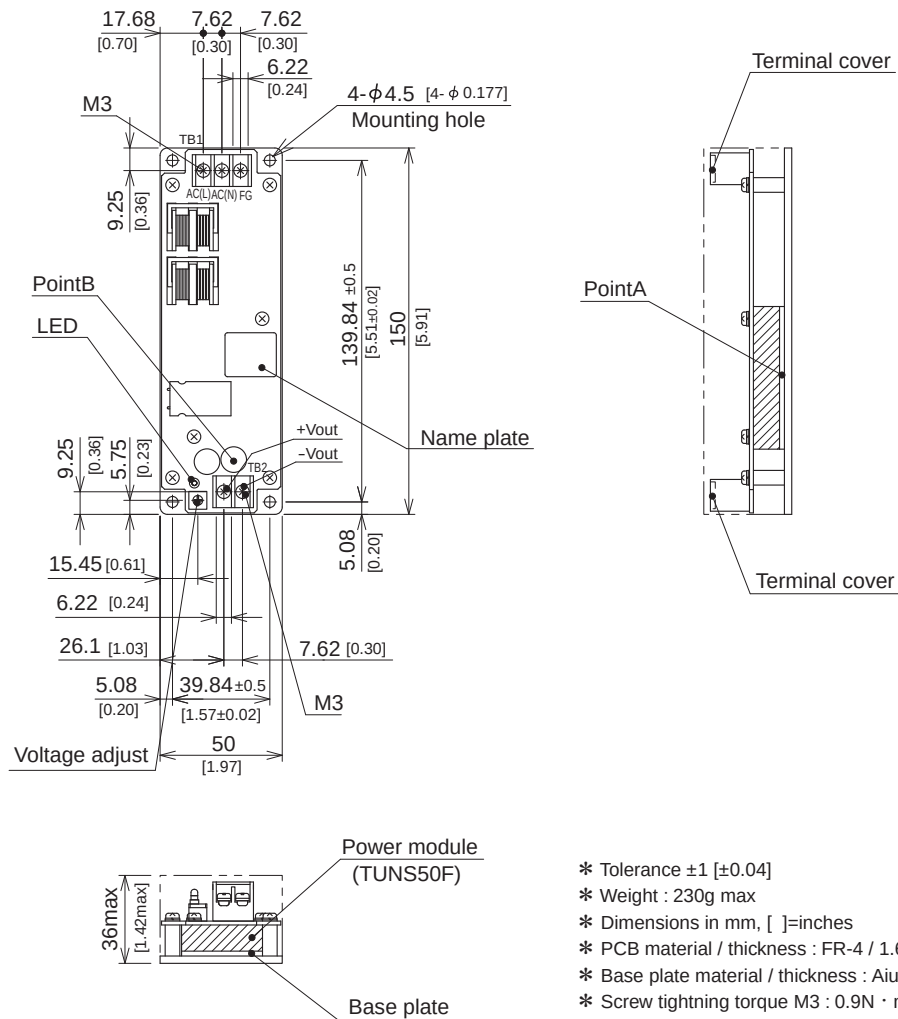
\*3 Please contact us about another class.

\*4 Refer to Instruction manual 3.2 and 3.3.

## Block diagram



## External view

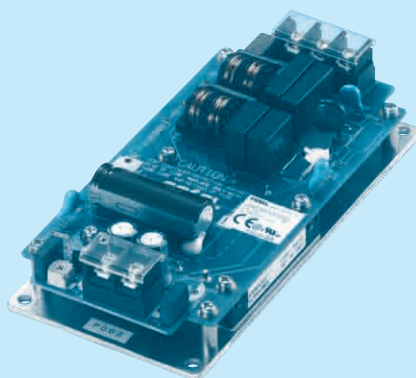


- \* Tolerance  $\pm 1$  [ $\pm 0.04$ ]
- \* Weight : 230g max
- \* Dimensions in mm, [ ]=inches
- \* PCB material / thickness : FR-4 / 1.6mm [0.06]
- \* Base plate material / thickness : Aiuminum / 3.0mm [0.12]
- \* Screw tightning torque M3 : 0.9N  $\cdot$  m (9.2kgf  $\cdot$  cm) max
- \* Please connect safety ground to the base plate in  $\phi 4.5$  [ $\phi 0.177$ ] hole.

## SNTUNS100

SNTUN S 100 F 05 - ☐

① ② ③ ④ ⑤ ⑥



Recommended EMI/EMC Filter  
NAC-04-472



High voltage pulse noise type : NAP series  
Low leakage current type : NAM series

\* The EMI/EMC Filter is recommended  
to connect with several devices.

- ① Series name  
② Single output  
③ Output wattage  
④ Universal Input  
⑤ Output voltage  
⑥ Optional  
C : with Coating  
J : Connector type

| MODEL                 | SNTUNS100F05 | SNTUNS100F12 | SNTUNS100F24 |
|-----------------------|--------------|--------------|--------------|
| MAX OUTPUT WATTAGE[W] | 100.0        | 100.8        | 100.8        |
| DC OUTPUT             | 5V 20A       | 12V 8.4A     | 24V 4.2A     |

## SPECIFICATIONS

|                                     | MODEL                                | SNTUNS100F05                                                                                | SNTUNS100F12  | SNTUNS100F24  |
|-------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------|---------------|---------------|
| INPUT                               | VOLTAGE[V]                           | AC85 - 264 1 $\phi$ (Please refer to the instruction manua 1.1 and 3.2)                     |               |               |
|                                     | CURRENT[A]                           | ACIN 100V 1.3typ (Io=100%)                                                                  |               |               |
|                                     |                                      | ACIN 200V 0.7typ (Io=100%)                                                                  |               |               |
|                                     | FREQUENCY[Hz]                        | 50/60 (47 - 63)                                                                             |               |               |
|                                     | EFFICIENCY[%]                        | ACIN 100V 79typ                                                                             | 81typ         | 82typ         |
|                                     |                                      | ACIN 200V 82typ                                                                             | 83typ         | 84typ         |
|                                     | POWER FACTOR (Io=100%)               | ACIN 100V 0.95typ                                                                           |               |               |
|                                     |                                      | ACIN 200V 0.90typ                                                                           |               |               |
| OUTPUT                              | INRUSH CURRENT[A]                    | ACIN 100V 20yp (Io=100%) (At cold start) (Ta=25°C)                                          |               |               |
|                                     |                                      | ACIN 200V 40typ (Io=100%) (At cold start) (Ta=25°C)                                         |               |               |
|                                     | LEAKAGE CURRENT[mA]                  | 0.4/0.75 (ACIN 100V / 240V 60Hz, Io=100%, According to IEC60950-1 and DEN-AN)               |               |               |
|                                     | VOLTAGE[V]                           | 5                                                                                           | 12            | 24            |
|                                     | CURRENT[A]                           | 20                                                                                          | 8.4           | 4.2           |
|                                     | LINE REGULATION[mV]                  | 10max                                                                                       | 24max         | 48max         |
|                                     | LOAD REGULATION[mV]                  | 150max                                                                                      | 100max        | 100max        |
|                                     | RIPPLE[mVp-p]                        | 0 to +95°C *1 80max                                                                         | 120max        | 120max        |
|                                     |                                      | -20 to 0°C *1 140max                                                                        | 160max        | 160max        |
|                                     |                                      | 0 to 15% Load *1 160max                                                                     | 240max        | 240max        |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | RIPPLE NOISE[mVp-p]                  | 0 to +95°C *1 120max                                                                        | 150max        | 150max        |
|                                     |                                      | -20 to 0°C *1 200max                                                                        | 200max        | 250max        |
|                                     |                                      | 0 to 15% Load *1 240max                                                                     | 300max        | 300max        |
|                                     | TEMPERATURE REGULATION[mV]           | 0 to +65°C 50max                                                                            | 120max        | 240max        |
|                                     |                                      | -20 to +95°C 100max                                                                         | 240max        | 480max        |
|                                     | DRIFFT[mV]                           | *2 20max                                                                                    | 40max         | 90max         |
|                                     | OUTPUT VOLTAGE ADJUSTMENT RANGE[V]   | 4.50 - 5.50                                                                                 | 10.80 - 13.20 | 21.60 - 26.40 |
|                                     | OUTPUT VOLTAGE SETTING[V]            | 5.00 - 5.15                                                                                 | 12.00 - 12.48 | 24.00 - 24.96 |
|                                     | OVERCURRENT PROTECTION               | Works over 105% of rating and recovers automatically                                        |               |               |
|                                     | OVERVOLTAGE PROTECTION[V]            | 6.30 - 7.00                                                                                 | 13.90 - 16.35 | 27.60 - 32.40 |
| ISOLATION                           | REMOTE SENSING                       | Optional (Option:K)                                                                         | -             | -             |
|                                     | REMOTE ON/OFF                        | Not provided                                                                                |               |               |
|                                     | INPUT-OUTPUT                         | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15°C)            |               |               |
| ENVIRONMENT                         | INPUT-FG                             | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15°C)            |               |               |
|                                     | OUTPUT-FG                            | AC500V 1minute, Cutoff current = 100mA, DC500V 50M $\Omega$ min (20 $\pm$ 15°C)             |               |               |
|                                     | OPERATING TEMP., HUMID. AND ALTITUDE | -20 to +95°C (On aluminum base plate), 20 - 95%RH (Non condensing) *4                       |               |               |
| SAFETY AND<br>NOISE REGULATIONS     | STORAGE TEMP., HUMID. AND ALTITUDE   | -20 to +95°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max                         |               |               |
|                                     | VIBRATION                            | 10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis |               |               |
|                                     | IMPACT                               | 196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis                          |               |               |
| OTHERS                              | AGENCY APPROVALS                     | UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN                       |               |               |
|                                     | CONDUCTED NOISE                      | Complies with FCC-B, VCCI-B, CISPR-B, EN55011-B, EN55022-B                                  |               |               |
|                                     | HARMONIC ATTENUATOR                  | Complies with IEC61000-3-2 (Class A) *3                                                     |               |               |
| OTHERS                              | CASE SIZE/WEIGHT                     | 74 X 37 X 150mm [2.91 X 1.46 X 5.91 inches] (W X H X D) / 340g max                          |               |               |

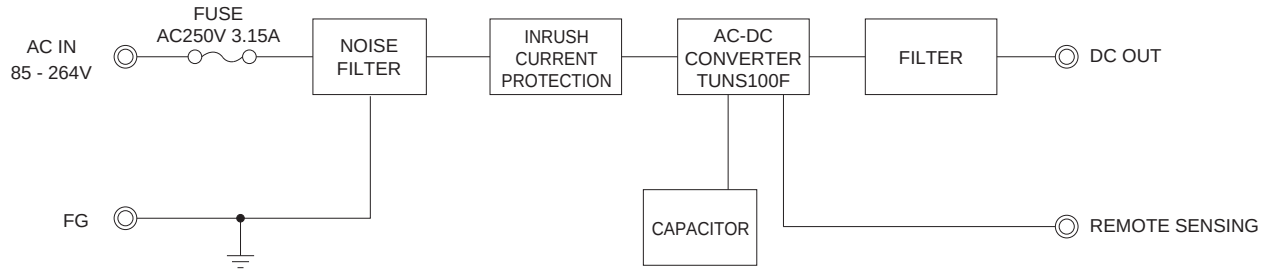
\*1 Refer to Instruction manual for measuring method of an electrical property.

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

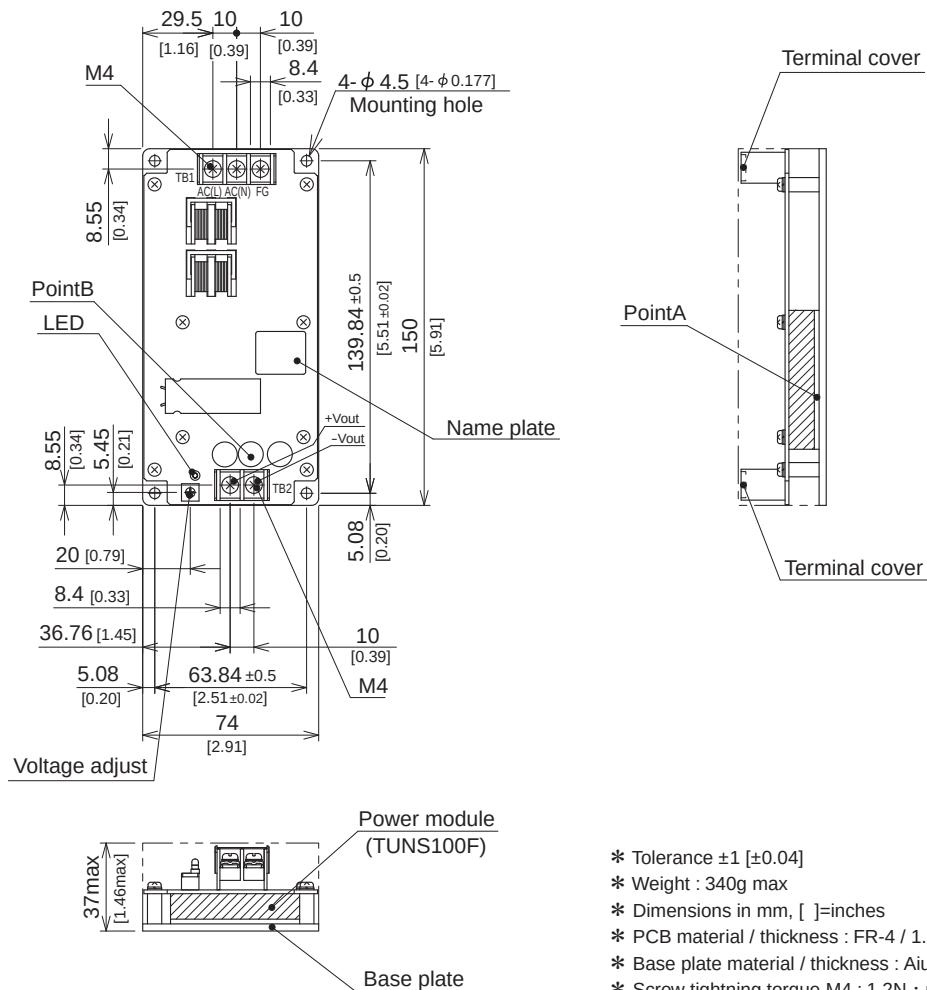
\*3 Please contact us about another class.

\*4 Refer to Instruction manual 3.2 and 3.3.

## Block diagram



## External view



- \* Tolerance  $\pm 1$  [ $\pm 0.04$ ]
- \* Weight : 340g max
- \* Dimensions in mm, [ ]=inches
- \* PCB material / thickness : FR-4 / 1.6mm [0.06]
- \* Base plate material / thickness : Aluminum / 3.0mm [0.12]
- \* Screw tightening torque M4 : 1.2N · m (12.2kgf · cm) max
- \* Please connect safety ground to the base plate in  $\phi 4.5$  [ $\phi 0.177$ ] hole.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cosel:

[SNTUNS100F24](#)